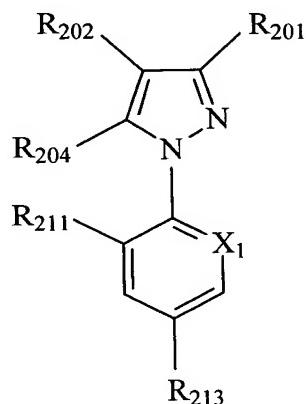


WHAT IS CLAIMED IS:

1. The method of controlling parasites in or on an animal in need of such control, said method comprising orally administering to said animal a parasiticidally effective, substantially non-emetic amount of a 1-arylpyrazole having the formula (XX):

5



(XX)

wherein:

R<sub>201</sub> is cyano, C(O)alkyl, C(S)NH<sub>2</sub>, alkyl, C(=NOH)NH<sub>2</sub> or C(=NNH<sub>2</sub>)NH<sub>2</sub>;

R<sub>202</sub> is S(O)<sub>h</sub>R<sub>203</sub>, C<sub>2</sub>-C<sub>3</sub> alkenyl, C<sub>2</sub>-C<sub>3</sub> haloalkenyl, cycloalkyl, halocycloalkyl or C<sub>2</sub>-C<sub>3</sub> alkynyl;

10

R<sub>203</sub> is alkyl or haloalkyl;

R<sub>204</sub> is -N(R<sub>205</sub>)C(O)aryl;

R<sub>205</sub> is alkyl, haloalkyl, cycloalkyl, halocycloalkyl, cycloalkylalkyl, halocycloalkylalkyl, alkoxyalkyl, haloalkoxyalkyl, C<sub>3</sub>-C<sub>5</sub> alkenyl, C<sub>3</sub>-C<sub>5</sub> haloalkenyl, C<sub>3</sub>-C<sub>5</sub> alkynyl, or C<sub>3</sub>-C<sub>5</sub> haloalkynyl;

15

X<sub>1</sub> is nitrogen or C-R<sub>212</sub>;

R<sub>211</sub> and R<sub>212</sub> are, independently, halogen, hydrogen, CN or NO<sub>2</sub>; R<sub>213</sub> is halogen, haloalkyl, haloalkoxy, -S(O)<sub>k</sub>CF<sub>3</sub>, or -SF<sub>5</sub>; and h and k are, independently, 0, 1, or 2; or a veterinarilly acceptable salt thereof.

5

2. The method according to Claim 1, wherein R<sub>201</sub> is cyano; R<sub>202</sub> is SCF<sub>3</sub>, S(O)CF<sub>3</sub> or S(O)<sub>2</sub>CF<sub>3</sub>; R<sub>211</sub> is Cl; X<sub>1</sub> is C-Cl; R<sub>213</sub> is CF<sub>3</sub> or SF<sub>5</sub>; R<sub>205</sub> is CH<sub>3</sub> and aryl is phenyl, thienyl, furyl or pyridyl, each of which is unsubstituted or substituted by alkoxy, haloalkyl or halogen.

10

3. The method according to Claim 2, wherein each of phenyl, thienyl, furyl and pyridyl is unsubstituted or substituted by methoxy, trifluoromethyl or chloro.

15

4. The method according to Claim 3, wherein aryl is phenyl, 4-methoxyphenyl, 4-trifluoromethylphenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, 6-chloro-2-pyridyl, 6-trifluoromethyl-2-pyridyl, 5-chloro-2-furyl, 5-trifluoromethyl-2-furyl, 5-methoxy-2-thienyl, or 5-trifluoromethyl-2-thienyl.

20

5. The method according to Claim 4, wherein R<sub>213</sub> is CF<sub>3</sub>.

25

6. The method according to Claim 5, wherein:

- (a) R<sub>202</sub> is SCF<sub>3</sub> and aryl is 4-methoxyphenyl;
- (b) R<sub>202</sub> is SCF<sub>3</sub> and aryl is 4-trifluoromethylphenyl; or
- (c) R<sub>202</sub> is SCF<sub>3</sub> and aryl is 2-furyl.

7. The method according to Claim 1, wherein the animal is a domestic animal.

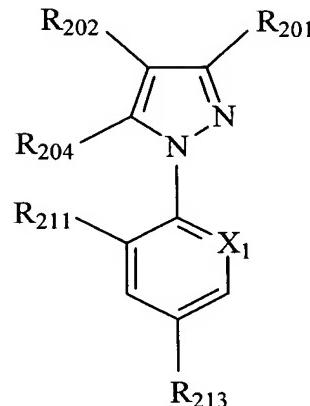
8. The method according to Claim 6, wherein the domestic animal is a  
5 cat or dog.

9. The method according to Claim 1, wherein the compound of formula (XX) is orally administered to the animal in a dosage of from 0.1 to 500 mg/kg.

10 10. The method according to Claim 1, wherein the compound of formula (XX) is administered at a frequency of from about once per week to about once per year.

15 11. The method according to Claim 9, wherein the compound of formula (XX) is administered at a frequency of from about once per week to about once per year.

12. A compound having the formula (XX):



wherein:

5      R<sub>201</sub> is cyano, C(O)alkyl, C(S)NH<sub>2</sub>, alkyl, C(=NOH)NH<sub>2</sub> or C(=NNH<sub>2</sub>)NH<sub>2</sub>;

R<sub>202</sub> is S(O)<sub>h</sub>R<sub>203</sub>, C<sub>2</sub>-C<sub>3</sub> alkenyl, C<sub>2</sub>-C<sub>3</sub> haloalkenyl, cycloalkyl, halocycloalkyl or C<sub>2</sub>-C<sub>3</sub> alkynyl;

R<sub>203</sub> is alkyl or haloalkyl;

10     R<sub>204</sub> is -N(R<sub>205</sub>)C(O)aryl;

R<sub>205</sub> is alkyl, haloalkyl, cycloalkyl, halocycloalkyl, cycloalkylalkyl, halocycloalkylalkyl, alkoxyalkyl, haloalkoxyalkyl, C<sub>3</sub>-C<sub>5</sub> alkenyl, C<sub>3</sub>-C<sub>5</sub> haloalkenyl, C<sub>3</sub>-C<sub>5</sub> alkynyl, or C<sub>3</sub>-C<sub>5</sub> haloalkynyl;

X<sub>1</sub> is nitrogen or C-R<sub>212</sub>;

15     R<sub>211</sub> and R<sub>212</sub> are, independently, halogen, hydrogen, CN or NO<sub>2</sub>;

R<sub>213</sub> is halogen, haloalkyl, haloalkoxy, -S(O)<sub>k</sub>CF<sub>3</sub>, or -SF<sub>5</sub>; and

h and k are, independently, 0, 1 or 2;

or a veterinarilly acceptable salt thereof.

13. A compound according to Claim 12, wherein R<sub>201</sub> is cyano; R<sub>202</sub> is SCF<sub>3</sub>, S(O)CF<sub>3</sub> or S(O)<sub>2</sub>CF<sub>3</sub>; R<sub>211</sub> is Cl; X<sub>1</sub> is C-Cl; R<sub>213</sub> is CF<sub>3</sub> or SF<sub>5</sub>; R<sub>205</sub> is CH<sub>3</sub> and aryl is phenyl, thienyl, furyl or pyridyl, each of which is unsubstituted or substituted by alkoxy, haloalkyl or halogen.

5

14. A compound according to Claim 13, wherein each of phenyl, thienyl, furyl and pyridyl is unsubstituted or substituted by methoxy, trifluoromethyl or chloro.

10

15. A compound according to Claim 14, wherein aryl is phenyl, 4-methoxyphenyl, 4-trifluoromethylphenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, 6-chloro-2-pyridyl, 6-trifluoromethyl-2-pyridyl, 5-chloro-2-furyl, 5-trifluoromethyl-2-furyl, 5-methoxy-2-thienyl, or 5-trifluoromethyl-2-thienyl.

15

16. A compound according to Claim 15, wherein R<sub>213</sub> is CF<sub>3</sub>.

20

17. The compound according to Claim 16, wherein:

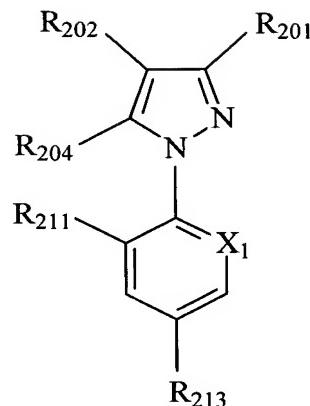
(a) R<sub>202</sub> is SCF<sub>3</sub> and aryl is 4-methoxyphenyl;

(b) R<sub>202</sub> is SCF<sub>3</sub> and aryl is 4-trifluoromethylphenyl; or

(c) R<sub>202</sub> is SCF<sub>3</sub> and aryl is 2-furyl.

18. A composition comprising a parasitically effective, substantially non-emetic amount of a compound having the formula (XX):

25



(XX)

wherein:

R<sub>201</sub> is cyano, C(O)alkyl, C(S)NH<sub>2</sub>, alkyl, C(=NOH)NH<sub>2</sub> or C(=NNH<sub>2</sub>)NH<sub>2</sub>;

R<sub>202</sub> is S(O)<sub>h</sub>R<sub>203</sub>, C<sub>2</sub>-C<sub>3</sub> alkenyl, C<sub>2</sub>-C<sub>3</sub> haloalkenyl, cycloalkyl, halocycloalkyl or C<sub>2</sub>-C<sub>3</sub> alkynyl;

R<sub>203</sub> is alkyl or haloalkyl;

R<sub>204</sub> is -N(R<sub>205</sub>)C(O)aryl;

R<sub>205</sub> is alkyl, haloalkyl, cycloalkyl, halocycloalkyl, cycloalkylalkyl, halocycloalkylalkyl, alkoxyalkyl, haloalkoxyalkyl, C<sub>3</sub>-C<sub>5</sub> alkenyl, C<sub>3</sub>-C<sub>5</sub> haloalkenyl, C<sub>3</sub>-C<sub>5</sub> alkynyl, or C<sub>3</sub>-C<sub>5</sub> haloalkynyl;

X<sub>1</sub> is nitrogen or C-R<sub>212</sub>;

R<sub>211</sub> and R<sub>212</sub> are, independently, halogen, hydrogen, CN or NO<sub>2</sub>;

R<sub>213</sub> is halogen, haloalkyl, haloalkoxy, -S(O)<sub>k</sub>CF<sub>3</sub>, or -SF<sub>5</sub>; and

h and k are, independently, 0, 1, or 2;

or a veterinarilly acceptable salt thereof;

and a veterinarilly acceptable carrier therefor.

19. A veterinary composition according to Claim 18 comprising, in oral unit dosage form:

5           (a)     a parasiticidally effective, substantially non-emetic amount of a compound having the formula (XX) as defined in Claim 18, or a veterinarianily acceptable salt thereof; and

             (b)     a veterinarianily acceptable carrier therefor.

10          20. A veterinary composition according to Claim 19, wherein the oral unit dosage amount of the compound of formula (XX) is from 0.1 to 500 mg per kg of animal body weight.